



Docket No. 24061.148 (TSMC2003-0893)
Customer No. 42717

UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Chen-Bau Wu, et al.

Serial No.: 10/821,432

Filed: April 9, 2004

For: High Voltage Semiconductor Device
Utilizing a Deep Trench Structure

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Docket Number: 24061.148
(TSMC2003-0893)

Examiner: To Be Determined

Art Unit: 2811

Conf. No.: 1237

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL SHEET TO POWER OF ATTORNEY

In accordance with 37 CFR 1.32 (c)(3) and with reference to the accompanying Power of Attorney, please recognize the following ten patent practitioners as being of record in this application.

| Name | Registration Number |
|-------------------|---------------------|
| David M. O'Dell | 42,044 |
| Jeffrey M. Becker | 35,442 |
| Timothy F. Bliss | 50,925 |
| Andrew S. Ehmke | 50,271 |
| Dave R. Hofman | 55,272 |
| Wei Wei Jeang | 33,305 |
| Julie M. Nickols | 50,826 |
| J. Andrew Lowes | 40,706 |
| T. Murray Smith | 30,222 |
| Chien Wei Chou | 41,672 |

Respectfully submitted,

David M. O'Dell
Registration No. 42,044

Dated: 8-17-04

HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 972-739-8635
Facsimile: 214-200-0853

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Bonnie Boyle
Name

8-18-04
Date



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|-----------------------------------|---|-------------------------|---------------|
| In re application of: | § | Attorney Docket No.: | 24061.148 |
| Chen-Bau Wu et al. | § | | TSMC2003-0893 |
| | § | | |
| Serial No.: Unknown | § | Customer No. 27683 | |
| | § | | |
| Filed: Herewith | § | Group Art Unit: Unknown | |
| | § | | |
| For: A HIGH VOLTAGE SEMICONDUCTOR | § | Examiner: Unknown | |
| DEVICE UTILIZING A DEEP TRENCH | § | | |
| STRUCTURE | § | | |

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

POWER OF ATTORNEY FOR PATENT APPLICATION

As a representative of the Assignee, Taiwan Semiconductor Manufacturing Company, Ltd., I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David L. McCombs (Reg. No. 32,271); Jeffrey M. Becker (Reg. No. 35,442); James R. Bell (Reg. No. 26,528); Timothy F. Bliss (Reg. No. 50,925); Randall C. Brown (Reg. No. 31,213); Randall E. Colson (Reg. No. 40,566); Michael A. Davis, Jr. (Reg. No. 35,488); Andrew S. Ehmke (Reg. No. 50,271); Priscilla Ferguson (Reg. No. 42,531); Sarah T. Harris (Reg. No. 35,891); William E. Hickman (Reg. No. 46,771); David R. Hofman (Reg. No. P-55,727); Rita M. Irani (Reg. No. 31,028); Wei Wei Jeang (Reg. No. 33,305); Warren B. Kice (Reg. No. 22,732); J. Andrew Lowes (Reg. No. 40,706); Todd Mattingly (Reg. No. 40,298); Julie Nickols (Reg. No. 50,826); Gloria Norberg (Reg. No. 36,706); David M. O'Dell (Reg. No. 42,044); T. Murray Smith (Reg. No. 30,222); and Chien Wei Chou (Reg. No. 41,672).

Please address all correspondence and telephone calls regarding this application to:

David M. O'Dell
Attorney for Applicants
Haynes and Boone, LLP
901 Main Street, Suite 3100
Dallas, TX 75202-3789
972-739-8635 / 214-200-0853 - Fax

The undersigned is the representative for the Assignee of the entire right, title, and interest in the patent application identified above. A copy of the assignment or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is authorized to act on behalf of the Assignee.

Taiwan Semiconductor Manufacturing Company, Ltd.

Date

Chien-Wei Chou
Title: Director, IP Division



ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|----------------|----|--|
| (1) | Chen-Bau Wu | of | No. 7, Lane 38, Wenyi Se Zhubei City, Hsin-Chu, Taiwan, R.O.C. |
| (2) | Shun-Liang Hsu | of | No. 35, Jinshan N. 2Rd. Jinshan Village East District, Hsin-Chu, Taiwan, R.O.C. |
| (3) | You-Kuo Wu | of | 2F., No. 55, Mingfong St. Sijhih City Taipei, Taiwan, R.O.C. |
| (4) | Yu-Chang Jong | of | 11F-5, No. 371, Sec. 1 Guangfu Rd. Hsin-Chu City, Taiwan, R.O.C. |

have invented certain improvements in

A HIGH VOLTAGE SEMICONDUCTOR DEVICE UTILIZING A DEEP TRENCH STRUCTURE

for which we have executed an application for Letters Patent of the United States of America,

 of even date filed herewith; and
 X filed on April 9, 2004 and assigned application number 10/821,432; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name: Chen-Bau Wu

Residence Address: No. 7, Lane 38, Wenyi St., Zhubei City, Hsinchu County,
Taiwan (R.O.C.)

Dated: ☒ 4/16/2004

☒ Chen-Bau Wu

Inventor Signature

Inventor Name: Shun-Liang Hsu

Residence Address: No. 35, Jinshan N. 2 Rd. Jinshan Village, East District,
Hsin-Chu, Taiwan 300.

Dated: ☒ 4/16/2004

☒ Shun-Liang Hsu

Inventor Signature

Inventor Name: You-Kuo Wu

Residence Address: 2F., No. 55, Minglong St., Sijhih City, Taipei County 221,
Taiwan (R.O.C.)

Dated: ☒ 4/16/2004

☒ You-Kuo Wu.

Inventor Signature

Inventor Name: Yu-Chang Jong

Residence Address: 11F, -5, No. 371, Sec. 1, Guangfu Rd., Hsinchu City 300,
Taiwan (R.O.C.)

Dated: 4/16/2004

Yu-Chang Jong
Inventor Signature

R-71898.1